

Sub B

1. An interface apparatus for performing communications between a remote computer system and a host server over a "connection establishment" type network having an associated "connection-establishment" protocol, said computer system having application software for facilitating "always connected" type communications on a network between said computer system and said server, said apparatus comprising:
- a means for emulating the operation of an "always connected" type I/O device driver to said application software during transmission of said communications;
- wherein in response to said emulation means said application software functions as though said communications are being transmitted over an "always connected" type network with another computer system utilizing "always connected" type protocol and said communications are transmitted over said "connection establishment" type network without performing connection establishment steps.
2. The apparatus as described in Claim 1 wherein said emulation means comprises means for emulating "always connected" type network services.
3. The apparatus as described in Claim 2 wherein said emulation means comprises means for intercepting "always connected" type service messages received from said application software and means for generating "always connected" type service messages for transmitting to said application software in response to said received service messages.
4. The apparatus as described in Claim 3 wherein "always connected" type network services are ARP services.

5. The apparatus as described in Claim 3 wherein said "always connected" type network services are DHCP services.

6. The apparatus as described in Claims 4 wherein in response to an ARP message transmitted from said application software said emulation means transmits an ARP message to said application software which includes an associated address corresponding to a globally unique identification address of said apparatus, wherein said host computer perceives said associated address is a destination IP address of another computer system that is on a same "always connected" type network as said computer system, and wherein in response to receiving said ARP message including said associated address, said computer system passes said communication through said apparatus for transmission on said "connection establishment" type network.

7. The apparatus as described in Claim 5 wherein in response to an DHCP message transmitted from said application software said emulation means transmits a DHCP message to said application software which includes an associated identifier corresponding to a IP address, wherein said computer system perceives said associated identifier is a dynamically assigned IP address, and wherein in response to receiving said DHCP message including said associated identifier, said associated identifier is assigned to a TCP/IP stack so as to properly configure said TCP/IP stack of said computer system.

8. The apparatus as described in Claim 1 wherein said "always connected" type communications are LAN communications and said "always connection" type I/O device driver is a LAN I/O device driver.

Table 1. Mean values of the variables measured during the 60-min test

initiating a transmission of a communication with said application software;
emulating the operation of an "always connected" type I/O device driver
thereby causing said application software to function as though said
communications are being transmitted over a network with another computer
system utilizing an "always connected" type protocol and causing said application
software to pass said communications to a wireless modem apparatus for
transmission on said wireless network;

20 11. The method as described in Claim 10 wherein said step of emulating
the operation of an "always connected" type I/O device driver comprises the step
of emulating "always connected" type network services.

12. The method as described in Claim 11 wherein said step of emulating
25 comprises intercepting "always connected" type network service messages
transmitted from said application software and, in response, transmitting "always
connected" type network service messages back to said application software.

14. The method as described in Claim 12 wherein said "always
5 connected" type network services include DHCP services.

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~~Add On~~

Add B1